PATENT APPLICATION 10/033,848

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REMARKS

This Application has been carefully reviewed in light of the Office Action mailed December 4, 2002. In order to advance prosecution of this Application, Applicant has responded to each notation by the Examiner. Applicant submits that all of the pending claims are in a condition of allowance. Applicant respectfully requests reconsideration and favorable action in this case.

#### **Statutory Double Patenting Rejections**

The Examiner rejects Claims 95-97 under 35 U.S.C. § 101 as claiming the same invention as that of Claim 1 of U.S. Patent No. 6,356,384 to Mohammed N. Islam (Islam '384). The Examiner also rejects Claims 95-97, 99-100, and 102-104 under 35 U.S.C. § 101 as claiming the same invention as that of Claim 91 of prior U.S. Patent No. 6,052,393 to Mohammed N. Islam (Islam '393). Applicant respectfully traverses these Elaim rejections for the reasons discussed below.

Statutory double patenting exists if the same invention is claimed twice. M.P.E.P. § 804 (II)(A). A reliable test for double patenting under 35 U.S.C. §101 is whether a claim in the application could be literally infringed without literally infringing a corresponding claim in the patent. M.P.E.P. § 804(II)(A); In re Vogel, 164 U.S.P.Q. 619 (CCPA 1970). If there is an embodiment of the invention that falls within the scope of one claim, but not the other claim, then identical subject matter is not defined by both claims and statutory double patenting does not exist.

## a. Claim 95 does not claim same invention as Islam '384:

Applicant respectfully submits that Claim 95 of the present application does not claim the same invention as that claimed by Claim 1 of *Islam '384*. Among other features, independent Claim 95 of the present application recites, in part, "dividing an optical signal at a predetermined wavelength into a first beam having a wavelength less than the predetermined wavelength and a second beam having a wavelength greater than said predetermined wavelength." Additionally, independent Claim 95 of the present application recites, in part, "directing said first beam to a Raman amplifier."

By contrast, independent Claim 1 of *Islam '384* claims "dividing an optical signal with wavelength of 1430 nm to 1620 nm at a preselected wavelength into a first beam and a second beam." Claim 1 of *Islam '384* further claims "directing the first beam to a Raman amplifier assembly that includes a dispersion compensating fiber with a magnitude of dispersion of at least 50 ps/(nm)(km) to produce an amplified first beam." Applicant respectfully submits that identical subject matter is not defined by both claims and statutory double patenting does not exist. Accordingly, Applicant respectfully requests that the Examiner withdraw the statutory double patenting rejection and favorable action in independent Claim 95 and all claims depending therefrom.

## b. Claim 95 does not claim same invention as Islam '393:

Applicant respectfully submits that Claim 95 of the present application does not claim the same invention as that claimed by Claim 91 of *Islam '393*. Among other features, independent Claim 95 of the present application recites, in part, "directing said first beam to a Raman amplifier." Additionally, independent Claim 95 of the present application recites, in part, "directing said second beam to a rare-earth doped amplifier."

By contrast, independent Claim 91 of *Islam '393* claims "a broadband <u>Sagnac Raman amplifier comprising a first reflector; a second reflector...; an input port...; a pumping means...; an output port." Claim 91 of *Islam '393* further claims "an erbium <u>doped fiber amplifier."</u> Applicant respectfully submits that identical subject matter is not defined by both claims and statutory double patenting does not exist. Accordingly, Applicant respectfully requests that the Examiner withdraw the statutory double patenting rejection and favorable action in independent Claim 95 and all claims depending therefrom.</u>

## c. Claim 99 does not claim same invention as Islam '393:

Applicant respectfully submits that Claim 99 of the present application does not claim the same invention as that claimed by Claim 91 of *Islam '393*. Among other features, independent Claim 99 of the present application recites, in part, "one or more Raman amplifiers coupled to the splitter." Additionally, independent Claim 99 of the

present application recites, in part, "one or more rare-earth doped amplifiers coupled to the splitter."

By contrast, independent Claim 91 of *Islam '393* claims "a broadband <u>Sagnac Raman amplifier comprising a first reflector; a second reflector...; an input port...; a pumping means...; an output port." Claim 91 of *Islam '393* further claims "an erbium doped fiber amplifier." Applicant respectfully submits that identical subject matter is not defined by both claims and statutory double patenting does not exist. Accordingly, Applicant respectfully requests that the Examiner withdraw the statutory double patenting rejection and favorable action in independent Claim 99 and all claims depending therefrom.</u>

#### d. Claim 102 does not claim same invention as *Islam '393*:

Applicant respectfully submits that Claim 102 of the present application does not claim the same invention as that claimed by Claim 91 of *Islam '393*. Among other features, independent Claim 102 of the present application recites, in part, "a first amplifier coupled to the splitter." Additionally, independent Claim 102 of the present application recites, in part, "a second amplifier coupled to the splitter, wherein a pump wavelength of the first amplifier is larger than a pump wavelength of the second amplifier."

By contrast, independent Claim 91 of *Islam '393* claims "a broadband *Sagnac Raman amplifier comprising a first reflector; a second reflector...; an input port...; a pumping means...; an output port.*" Claim 91 of *Islam '393* further claims "an erbium doped fiber amplifier." Applicant respectfully submits that identical subject matter is not defined by both claims and statutory double patenting does not exist. Accordingly, Applicant respectfully requests that the Examiner withdraw the statutory double patenting rejection and favorable action in independent Claim 102 and all claims depending therefrom.

# e. Claim 103 does not claim same invention as Islam '393:

Applicant respectfully submits that Claim 103 of the present application does not claim the same invention as that claimed by Claim 91 of *Islam '393*. Among other features, independent Claim 103 of the present application recites, in part, "a distributed gain medium coupled to the splitter, the distributed gain medium providing gain through a third order non-linearity." Additionally, independent Claim 103 of the present application recites, in part, "one or more rare-earth doped amplifiers coupled to the splitter."

By contrast, independent Claim 91 of *Islam '393* claims "a broadband <u>Sagnac Raman amplifier comprising a first reflector; a second reflector...; an input port...; a pumping means...; an output port." Claim 91 of *Islam '393* further claims "an erbium doped fiber amplifier." Applicant respectfully submits that identical subject matter is not defined by both claims and statutory double patenting does not exist. Accordingly, Applicant respectfully requests that the Examiner withdraw the statutory double patenting rejection and favorable action in independent Claim 103 and all claims depending therefrom.</u>

### Provisional Statutory Double Patenting Rejections

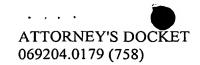
The Examiner provisionally rejects Claims 95-97 under 35 U.S.C. § 101 as claiming the same invention as that of Claim 1 of co-pending Application No. 09/765,972. The Examiner also provisionally rejects Claims 99-100 and 102-104 under 35 U.S.C. § 101 as claiming the same invention as that of Claim 6 of co-pending Application No. 09/765,972. The Examiner further provisionally rejects Claims 95-97 under 35 U.S.C. § 101 as claiming the same invention as that of Claims 1-3 of co-pending Application No. 09/990,142. Applicant respectfully traverses these claim rejections for the reasons discussed below.

Applicant has canceled Claims 1 and 6 from co-pending patent Application No. 09/765,972. The cancellation of Claims 1 and 6 from the 09/765,972 patent application obviates the statutory double patenting rejection for independent Claims 95, 99, 102, 103, and 104, and all claims depending therefrom in the present patent application. For at least these reasons, Applicant respectfully requests that the Examiner withdraw the provisional statutory double patenting rejection and favorable action in this case.

Applicant has canceled Claims 1-3 from co-pending patent Application No. 09/990,142. The cancellation of Claims 1-3 from the 09/990,142 patent application obviates the statutory double patenting rejection for independent Claim 95 and all claims depending therefrom in the present patent application. For at least these reasons, Applicant respectfully requests that the Examiner withdraw the provisional statutory double patenting rejection and favorable action in this case.

## **Terminal Disclaimer**

Upon Applicant receiving confirmation that the pending claims are otherwise in a condition for allowance, Applicant will consider filing a terminal disclaimer, if required by the Examiner, to advance prosecution in this case.



### **CONCLUSION**

Applicant believes pending Claims 95-97, 99-100, and 102-104 are in condition for allowance. Early and favorable action is respectfully requested for all pending claims.

If the Examiner feels that a telephone conference would advance prosecution of this Application in any manner, the Examiner is invited to contact Douglas M. Kubehl, Attorney for Applicant, at the Examiner's convenience at (214) 953-6486.

Applicant has included a check for \$55.00 for the one-month extension of time, believes that no fees are due, however, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

BAKER BOTTS L.L.P.

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